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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,234	10/16/2001	Mituhiko Murata	01-221	3660

23400 7590 06/17/2003

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RESTON, VA 20190

EXAMINER

ADDISON, KAREN B

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,234

Applicant(s)

MURATA ET AL.

Examiner

Karen B Addison

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 15 is objected to because of the following informalities: "the rear" is misspelled on line one. appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima (JP11-280624) in view of Isozumi (5052235).

Tajima discloses a starter in fig.6 comprising: a starting motor, a pinion shaft (23) having a sleeve (25) rotatable by the starting motor and supported slidably in an axial direction, the pinion shaft having a recess (A) on an outer periphery of a front end portion thereof and a step (25a) on the outer periphery thereof. Tajima also discloses, a pinion fitted (26) on the pinion shaft having a sleeve (23,25) in a rotation-restricted manner relative to the pinion shaft and movable forward integrally with the pinion shaft wherein, the pinion has a front end surface further from the motor and a rear end surface adjacently facing the step (25a) in the axial direction. Wherein, the pinion (26) is connected to the shaft through splines (142) and the outer peripheral portion to the rear end surface of the pinion protrudes towards the step in the axial direction for defining a chamber

(recess A) in an inner periphery of the pinion and a cover (33) provided at the front end portion of the pinion shaft and fixed to the pinion that surrounds the outer periphery of the restricting member (143).

Referring to claim 10,11,12,13

As seen above substantially discloses the claim invention including: a rotatable pinion shaft slidably supported in an axial direction having the first end and second end. The second end has a step (25a) on the outer periphery. Wherein, the step (25a) has a wall (B) rising from the outer periphery of the pinion shaft (23,25) in a radial direction and the pinion is fitted on the second end of the pinion shaft in front of the step in the axial direction. Tajima also discloses, the pinion having a front end surface and a rear end surface opposite to the front end surface and adjacently facing the rising wall (b) of the step in the axial direction; disposed between a rear end portion of the pinion brought in contact with the rising wall of the of the step when the pinion meshes with a ring gear for the purpose of starting an engine. Tajima does not show a pressing member disposed between a rear end portion of the pinion and the rising wall of the step. When, the pinion meshes the ring gear and a pressing member disposed between the pinion and the step of the pinion shaft, pressing the pinion toward the restriction member relative to the pinion shaft.

Iszumi teaches a starter in fig.2 comprising: a pressing spring (14) disposed between the pinion (10) and the step of the pinion shaft (5) pressing the pinion toward the restriction member (12) relative to the pinion shaft. Wherein the pressing member is disposed between a rear end portion of rising wall of the step when the pinion meshes

the gear ring for the purpose of rotating and starting the engine (col. 3 line 55-58). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the starter of Tajima of with the pressing spring of Iszumi for the purpose of providing a coaxial engine starter in which the generation of noise is reduced.

Response to Arguments

Applicant's arguments with respect to claims 7-13 and 15-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 703-306-5855. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A handwritten signature in black ink, appearing to be "N. Ramirez", is located at the bottom right of the page.